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EXAMINER

PHAM, HUNG Q

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/620,445

Applicant(s)

LEVANONI ET AL.

Examiner

HUNG Q. PHAM

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Response to Arguments***

Applicant's arguments filed 03/09/2005 have been fully considered but they are not persuasive.

- As argued by applicants at page 8:

*nowhere in these passages (nor anywhere else for that matter) does Renslo teach or suggest a computer method that includes refining the data mining technique in cognizance of pattern changes embedded in the demand database and the supply database as a consequence of updating at least one of the demand database and the supply database. Indeed, Renslo merely teaches updating the knowledge base to change the generated forecasts.*

Examiner respectfully traverses because of the following reasons:

As illustrated at FIG. 14, after products are updated with most recent data, Merlin forecast and product information could be reviewed and changed if the reports and graphs are not appropriate. As in FIG. 15, rules in knowledge base as the data mining technique is modified, and Merlin simulation is run to see if there is an improving confident change and increasing FC accuracy. An example of report forecast includes data from order history and product information is shown at FIG. 11A. As seen, a change in forecast report or graph, obviously, is a consequence of updating product information or supply database, and knowledge base rules could be refined based on the user's awareness of a change of the forecast report or graph as pattern change embedded in the order history and product information to have a more accurate report.

- As argued by applicants at page 9:

*The knowledge base of Renslo is not updated based on changes made to the relational database. Renslo merely teaches updating the rules stored in the knowledge base. However, the updating of the knowledge base rules is not based on changes made to the relational database of Renslo.*

Examiner respectfully traverses because the knowledge base rules could be updated based on the user's awareness of a change of the forecast report or graph as discussed above. Additionally, as recited in claims 1, 10 and 12, the data mining technique is refined based on pattern changes not the database as argued.

- As argued by applicants at page 9:

*Furthermore, while the forecasting results of Renslo are changed based on the updates to the relational database and the knowledge base, this does not teach or suggest "refining the data mining technique" as recognized by exemplary aspects of the claimed invention.*

Examiner respectfully traverses because the knowledge based is refined based on the rule changes as illustrated at FIG. 15.

- As argued by applicant at page 9 with respect to the features of claims 19-21. Examiner admitted that Renslo does not teach the limitation of claims 19-21. However, these missing features are taught by Bieganski et al. as discussed in the previous Office Action.

As argued by applicants at page 10 with respect to Lu reference:

*The Examiner alleges that Lu would have been combined with Renslo to form the claimed invention of claims 8 and 16. Applicants submit, however, that these references would not have been*

*combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.*

*Indeed, these references are directed to different problems and solutions. Specifically, Renslo is directed to the integration of a knowledge base with an automatically updated database to create optimized forecasting results (see Renslo at column 1, lines 60-66), whereas Lu is merely directed to applying neural networks to mine classification rules for large databases (see Lu at page 957). Therefore, these references are completely unrelated, and a person of ordinary skill in the art, attempting to improve Renslo; would have no reasonable motivation to consult the disparate reference Lu, absent impermissible hindsight.*

In response to applicant's argument that Renslo and Lu are nonanalogous arts, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, there is no difference of problems and solution as asserted by applicants because both of them are data mining technique regardless of the size of the database.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the difference between Renslo and the claimed invention is just the data mining technique, and by applying the neural network as taught by Lu, a better predict result could be obtained and a person of ordinary skill in the art would have a motivation to modify because of that reason.

- Applicant's argument with respect to the amended features and the limitations of claims 19-21 at pages 10 and 11 is respectfully traversed with the reasons as discussed above.

- As argued by applicants at page 11 with respect to Bieganski reference:

*The Examiner alleges that Bieganski would have been combined with Renslo to form the claimed invention of claims 17 and 19-21. Applicants submit, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.*

*Indeed, these references are directed to different problems and solutions. Specifically, Renslo is directed to the integration of a knowledge base with an automatically updated database to create optimized forecasting results (see Renslo at column 1, lines 60-66), whereas Bieganski is merely directed to generating a compatibility-aware recommendation output set based on a set of item*

*compatibility rules (see Bieganski at page 957). Therefore, these references are completely unrelated, and a person of ordinary skill in the art, attempting to improve Renslo, would have no reasonable motivation to consult the disparate reference Bieganski, absent impermissible hindsight.*

In response to applicant's argument that Renslo and Bieganski are nonanalogous arts, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, there is no difference of problems and solution as asserted by applicants because both of them using rules to predict a result.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

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references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the feature as taught by Bieganski is a must for Renslo system in order to provide a system with the ability to recommend items based on the compatibility of a new item with items already on the recommendation list.

- Applicant's argument with respect to the amended features and the limitations of claims 19-21 at page 12 is respectfully traversed with the reasons as discussed above.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 1, 3, 5-7, 9-13, 15, 17 and 19-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.**



As in claims 1, 9, 10 and 13, the claimed *refining the data mining technique in cognizance of pattern changes embedded in said demand database and said supply database as a consequence of updating the at least one of said demand database and said supply database* was not described in the Specification.

As in claim 3, the claimed *updating the demand database comprises considering the results of employing a data mining technique* was not described in the Specification.

As in claim 5, the claimed *updating the supply database comprises considering the effects of the employing the data mining technique on the demand database* was not described in the Specification.

As in claims 6, the claimed *refining an employed data mining technique in cognizance of pattern changes embedded in said demand database and said supply database as a consequence of updating the demand database* was not described in the Specification.

As in claim 7, the claimed *refining an employed data mining technique in cognizance of pattern changes embedded in said demand database and said supply database as a consequence of updating the supply database* was not described in the Specification.

As in claim 11, the claimed *updating the supply database to include the effects of employing the data mining technique on the demand database* was not described in the Specification.

As in claim 12, the claimed *refining the employed data mining technique by analyzing pattern changes embedded in the demand database and the supply database as a consequence of an updating of the demand database* was not described in the Specification.

As in claim 15, the claimed *the data mining module is refined by analyzing pattern changes embedded in each data base* was not described in the Specification.

As in claim 17, the claimed *adding a product to a recommended product stockpile if the system determines there is a match between a classification of a demand feature from the demand database and a classification of a demand feature from the supply database* was not described in the Specification.

As in claim 19, the claimed *adding a product to a recommended product stockpile if the data mining technique determines there is a match between a classification of a demand feature from the demand database and a classification of a demand feature from the supply database* was not described in the Specification.

As in claim 20, the claimed *means for generating an output data stream adds a product to a recommended product stockpile if the means for employing a data mining technique determines there*

*is a match between a classification of a demand feature from the demand database and a classification of a demand feature from the supply database* was not described in the Specification.

As in claim 21, the claimed *the system adds a product to a recommended product stockpile if the system determines there is a match between a classification of a demand feature from the demand database and a classification of a demand feature from the supply database* was not described in the Specification.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-7, 9-15 and 18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Renslo et al. [USP 5,446,890].**

Regarding claims 1, 9 and 10, Renslo discloses a computer method of predicting product demand.

As illustrated at FIG. 19, database 26 holds all the necessary product and forecast information as well as order history and forecast result (FIG. 19, Lines 7-13).

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As seen, order history as *individual demand history*, and product information as *product stockpile information* are stored in the tables of relational database 26. In different words, the tables of relational database 26 indicates the steps of *providing a demand database comprising a compendium of individual demand history, and a supply database comprising a compendium of at least one of product stockpile management solutions, product stockpile information, and product stockpile diagnostics.*

In order to predict product demand, knowledge base as *a data mining technique* is used (Col. 3, Lines 45-63). To feed the expert system with information, data is automatically queried from the *demand database* and *supply databases* (Col. 5, Lines 60-61), which includes actual product order information, e.g., product #, product option, distribution market, unit volumes-current, unit volumes-historical, net revenue as *supply solution*, to produce forecasting results as *an output data stream* (Col. 3, Line 59-Col. 4, Line 3). Forecasting result is an analysis of future demands for individual products or variously grouped products as *demand problem* (Col. 1, Line 66-Col. 2, Line 10). In short, the technique as discussed performs the claimed *employing a data mining technique for interrogating said demand database and said supply databases for generating an output data stream, said output data stream correlating demand problem with supply solution.*

Renslo further discloses the step of *updating said supply database* at FIG. 14, and *refining the data mining technique in cognizance of pattern changes embedded in said demand database and said supply database as a consequence of updating the at least one of said demand database and said supply database* (as illustrated at FIG. 14, after products are updated with most recent data, Merlin forecast and product information could be reviewed and changed if the reports and graphs are not appropriate. As in FIG. 15, rules in knowledge

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base as the data mining technique is modified, and Merlin simulation is run to see if there is an improving confident change and increasing FC accuracy. An example of report forecast includes data from order history and product information is shown at FIG. 11A. As seen, a change in forecast report or graph, obviously, is a consequence of updating product information or supply database, and knowledge base rules could be refined based on the user's awareness of a change of the forecast report or graph as pattern change embedded in the order history and product information to have a more accurate report).

Regarding claim 2, Renslo teaches all the claim subject matters as discussed above with respect to claim 1, Renslo further discloses the step of *updating the demand database* (Col. 4, Lines 7-28).

Regarding claim 3, Renslo teaches all the claim subject matters as discussed above with respect to claim 2, Renslo further discloses *the updating the demand database comprises considering the results of employing a data mining technique* (Col. 4, Lines 7-28).

Regarding claim 4, Renslo teaches all the claim subject matters as discussed above with respect to claim 1, Renslo further discloses the step of *updating the supply database* (Col. 4, Lines 7-28).

Regarding claim 5, Renslo teaches all the claim subject matters as discussed above with respect to claim 4, Renslo further discloses *the updating the supply database comprises considering the effects of the employing the data mining technique on the demand database* (Col. 3, Lines 62-68, and Col. 4, Lines 1-5).

Regarding claim 6, Renslo teaches all the claim subject matters as discussed above with respect to claim 2, Renslo further discloses the step of *refining an employed data mining technique in cognizance of pattern changes embedded in each database as a consequence of updating the demand database* (Col. 7, Lines 47-50, and Col. 8, Lines 40-55).

Regarding claim 7, Renslo teaches all the claim subject matters as discussed above with respect to claim 4, Renslo further discloses the step of *refining an employed data mining technique in cognizance of pattern changes embedded in each database as a consequence of updating the supply database* (as illustrated at FIG. 14, after products are updated with most recent data, Merlin forecast and product information could be reviewed and changed if the reports and graphs are not appropriate. As in FIG. 15, rules in knowledge base as the data mining technique is modified, and Merlin simulation is run to see if there is an improving confident change and increasing FC accuracy. An example of report forecast includes data from order history and product information is shown at FIG. 11A. As seen, a change in forecast report or graph, obviously, is a consequence of updating product information or supply database, and knowledge base rules could be refined based on the user's awareness of a change of the forecast report or graph as

pattern change embedded in the order history and product information to have a more accurate report).

Regarding claim 11, Renslo teaches all the claim subject matters as discussed above with respect to claim 9, Renslo further discloses the step of *updating the supply database to include the effects of employing the data mining technique on the demand database* (Col. 3, Lines 62-68, and Col. 4, Lines 1-5).

Regarding claim 12, Renslo teaches all the claim subject matters as discussed above with respect to claim 9, Renslo further discloses the step of *refining the employed data mining technique by analyzing pattern changes embedded in the demand database and the supply database as a consequence of an updating of the demand database* (as illustrated at FIG. 14, after products or big deals are updated with most recent data, Merlin forecast and product information could be reviewed and changed if the reports and graphs are not appropriate. As in FIG. 15, rules in knowledge base as the data mining technique is modified, and Merlin simulation is run to see if there is an improving confident change and increasing FC accuracy. An example of report forecast includes data from order history and product information is shown at FIG. 11A. As seen, a change in forecast report or graph, obviously, is a consequence of updating product information or supply database, and knowledge base rules could be refined based on the user's awareness of a change of the forecast report or graph as pattern change embedded in the order history and product information to have a more accurate report).

Regarding claim 13, Renslo discloses a computer method of predicting product demand.

As illustrated at FIG. 19, database 26 holds all the necessary product and forecast information as well as order history and forecast result (FIG. 19, Lines 7-13). As seen, order history as *individual demand history*, and product information as *product stockpile resources* are stored in the tables of relational database 26. In different words, the tables of relational database 26 indicates the steps of providing *a demand database comprising a individual demand history, and a supply database comprising product stockpile resources*.

In order to predict product demand, knowledge base as *a data mining module* is used (Col. 3, Lines 45-63). To feed the expert system with information, data is automatically queried from the database as *demand database* and *supply databases* (Col. 5, Lines 60-61), which includes actual product order information, e.g., product #, product option, distribution market, unit volumes-current, unit volumes-historical, net revenue as *supply solutions*, to produce forecasting results as *an output data stream* (Col. 3, Line 59-Col. 4, Line 3). Forecasting result is an analysis of future demands for individual products or variously grouped products as *a demand problem* (Col. 1, Line 66-Col. 2, Line 10). In different words, the technique as discussed performs the claimed *a data mining module that accesses said demand and supply databases for generating an output data stream, said output data stream correlating a demand problem with a supply solution*.



Renslo further discloses *an updating unit that updates said supply database* at FIG. 14, and

*a refining unit that refines the data mining technique in cognizance of pattern changes embedded in said demand database and said supply database as a consequence of updating the at least one of said demand database and said supply database* (as illustrated at FIG. 14, after products are updated with most recent data, Merlin forecast and product information could be reviewed and changed if the reports and graphs are not appropriate. As in FIG. 15, rules in knowledge base as the data mining technique is modified, and Merlin simulation is run to see if there is an improving confident change and increasing FC accuracy. An example of report forecast includes data from order history and product information is shown at FIG. 11A. As seen, a change in forecast report or graph, obviously, is a consequence of updating product information or supply database, and knowledge base rules could be refined based on the user's awareness of a change of the forecast report or graph as pattern change embedded in the order history and product information to have a more accurate report).

Regarding claim 14, Renslo teaches all the claim subject matters as discussed above with respect to claim 13, Renslo further discloses *product supply resources comprise a compendium of at least one of product stockpile management solutions, product stockpile information, and product stockpile diagnostics* (FIG. 19, Lines 7-13).

Regarding claim 15, Renslo teaches all the claim subject matters as discussed above with respect to claim 13, Renslo further discloses *the data mining module is refined by*

*analyzing pattern changes embedded in each data base* (Col. 7, Lines 47-50, and Col. 8, Lines 40-55).

Regarding claim 18, Renslo teaches all the claim subject matters as discussed above with respect to claim 15, Renslo further discloses *the output data stream is fed as a subsequent input to update at least one of the demand database, the supply database, and the data mining module* (Col. 3, Line 5-Col. 4, Line 6).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Renslo et al. [USP 5,446,890] in view of Lu et al. [Effective Data Mining Using Neural Networks].**

Regarding claims 8 and 16, Renslo teaches all the claim subject matters as discussed above with respect to claims 1 and 13, but does not disclose the step of *employing neural networks as the data mining technique*. Lu teaches the technique of using neural networks for data mining (Lu, pages 957-961]. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Renslo technique by using neural networks instead of knowledge base in order to have a better predict result.

**Claims 17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Renslo et al. [USP 5,446,890] in view of Bieganski et al. [USP 6,412,012].**

Regarding claims 17 and 19-21, Renslo teaches all the claim subject matters as discussed above with respect to claim 13, but does not explicitly teach the step of *adding a product to a recommended product stockpile if the system determines there is a match between a classification of a demand feature from the demand database and a classification of a demand feature*

*from the supply database.* Bieganski discloses the step of *adding a product to a recommended product stockpile if the data mining technique determines there is a match between a classification of a demand feature from the demand database and a classification of a demand feature from the supply database* (Bieganski, Col. 4, Lines 65-67; Col. 5, Lines 1-4; Col. 6, Lines 13- 17; Col. 7, Lines 35-40; Col. 10, Lines 37-50). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teachings of Renslo such that a product to a recommended product stockpile if the data mining technique determines there is a match between a classification of a demand feature from the demand database and a classification of a demand feature from the supply database in order to provide a system with the ability to recommend items based on the compatibility of a new item with items already on the recommendation list.

**Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Renslo et al. [USP 5,446,890] and Bieganski et al. [USP 6,412,012], as applied to claims 19-21 above, further in view of Lu et al. [Effective Data Mining Using Neural Networks].**

Regarding claims 22-24, Renslo and Bieganski, in combination, teach all of the claimed subject matter as discussed above with respect to claims 19-21, but do not disclose the step of *employing neural networks as the data mining technique*. Lu teaches the technique of using neural networks for data mining (Lu, pages 957-961). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was

made to modify the Renslo and Bieganski technique by using neural networks instead of knowledge base in order to have a better predict result.

### ***Double Patenting***

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

**Claim 1 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim of prior U.S. Patent No. 6,732,099 B1. This is a double patenting rejection.**

As set forth in MPEP 804 (A) Statutory Double Patenting:

*... claims may be differently worded and still define the same invention. Thus, a claim reciting a widget having a length of "36 inches" defines the same invention as a claim reciting the same widget having a length of "3 feet."*

As specified in both of the Application's Specification and 6,732,099 B1, the data mining algorithm can comprehend *demand features, e.g., wherein a demand feature for say, men's shirts, may include shirt style, size, color, current local inventory, expected demand by week, as well as the specific region in which this particular demand was actualized. Thus, **product stockpile information** and **distribution center information** (6,732,099) have the same *current local inventory* information includes *shirt style, size, color* for data mining process.*

The chart below is to compare claims of the application and claim 1 of USP 6,732,099 B1.


<b><u>APPLICATION</u></b>	<b><u>6,732,099 B1</u></b>
<p>1. A computer method comprising:</p> <p>    providing a demand database comprising a compendium of individual demand history;</p> <p>    providing a supply database comprising a compendium of at least one of product stockpile management solutions, <u>product stockpile information</u>, and product stockpile diagnostics;</p> <p>    employing a data mining for interrogating said demand database and said supply database for generating an output data stream, said output data stream correlating demand problem with supply solution;</p> <p>    updating at least one of said demand database and said supply database; and</p> <p>    refining the data mining technique in cognizance of pattern changes embedded in said demand database and said supply database as a consequence of updating the at least one of said demand database and said supply database.</p>	<p>1. A computer method comprising:</p> <p>    providing a demand database comprising a compendium of individual demand history;</p> <p>    providing a distribution database comprising a compendium of at least one of distribution center management solutions, <u>distribution center information</u>, and distribution center diagnostics; and</p> <p>    employing a data mining technique for interrogating said demand and distribution databases, and generating an output data stream, said output data stream correlating a demand problem with a distribution solution.</p> <p>2. A method according to claim 1, further comprising: updating the demand database.</p> <p>3. A method according to claim 1, further comprising: updating the distribution database.</p> <p>12. A method according to claim 2, further comprising: refining said data mining technique in cognizance of pattern changes embedded in each database as a consequence of said updating the demand database.</p> <p>13. A method according to claim 3, further comprising: refining said data mining technique in cognizance of pattern changes embedded in each database as a consequence of said updating the distribution database.</p>

**Conclusion**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E. BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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HUNG Q PHAM  
Examiner  
Art Unit 2162

May 26, 2005

  
SHAHID ALAM  
PRIMARY EXAMINER